CALLANDER'S SURGICAL ANATOMY—Barry J. Anson, M.A., Ph.D. (Med. Sc.), Professor of Anatomy, Northwestern University Medical School; and Walter G. Maddock, M.S., M.D., F.A.C.S., Elcock Professor of Surgery, Northwestern University Medical School. W. B. Saunders Company, Philadelphia, 1952. 1,074 pages, 929 illustrations. \$14.00.

To those familiar with the first two editions of Callander's Anatomy little need be said regarding the value of this third edition. In the reviewer's opinion Callander's Anatomy is the leader in the field of surgical anatomy because it was written by a surgeon for surgeons and its approach to all regions of the body is the approach of the surgeon.

The publishers, W. B. Saunders Company, were very wise in their choice of the Anson-Maddock team to make the revision. Wherever illustrations from "The Atlas of Human Anatomy" could contribute to Callander's Surgical Anatomy they were used. Judgment in the use of these added illustrations and a number of quite new illustrations to go with the revised text have blended to make an excellent result in the third edition of Callander's Anatomy. The value of the work has been very much enhanced by the latest edition and in this reviewer's opinion the volume has become a "must" in the surgeon's library.

CLINICAL HEMATOLOGY — Maxwell M. Wintrobe, M.D., Ph.D., Professor of Medicine and Director, Laboratory for the Study of Hereditary and Metabolic Disorders, University of Utah, College of Medicine, Salt Lake City. Third Edition, thoroughly revised. 220 illustrations and 17 plates, 13 in color. Lea & Febiger, Philadelphia, 1951. 1,048 pages. \$12.50.

The many recent advances in hematology have necessitated a new edition of this book, and Dr. Wintrobe again has done an admirable job. Unlike some other books which are obsolete before they appear, the text and bibliography is complete to the time of publication.

The newer therapeutic agents are included; among them are folic acid, vitamin  $B_{12}$ , the nitrogen mustards, the folic acid antagonists—ACTH and cortisone. The section on immunity mechanisms in hemolytic anemia is somewhat brief. The discussion of blood coagulation is as complete as is possible at this time. Several new and excellent illustrations from other recent publications have been included.

Despite the increasing size of the book (now over 1,000 pages), it is still very readable. With the complete bibliography and careful indexing, it is an excellent reference source. This book continues to be the outstanding text in the field of hematology and one of the classic texts in the field of medicine.

BIOLOGICAL ANTAGONISM—The Theory of Biological Relativity—Gustav J. Martin, Sc.D., Research Director, the National Drug Company, Philadelphia. The Blakiston Company, Philadelphia, 1951. 516 pages. \$8.50.

This book covers very comprehensively the general phenomenon of the antagonism between various substances in biological systems, especially those instances of displacement reactions in which a substance interferes with a biologically important substance by reason of its structural similarity. The treatment is very clearly organized and is arranged in a logical manner that will facilitate the study of the subject by those who are not completely acquainted with the field; yet it is so complete that it will adequately serve as a source book for all of the important work done on this subject. There are 1900 references to all of the major papers and it brings the entire subject up to date in a most illuminating cross-section of our present knowledge.

The subject is introduced by a discussion of enzymatic inhibition, since this is basic to the whole theory, and then proceeds to pharmacological examples, including the drugs

altering the function of the autonomic nervous system, the antihistamines, the depressants of the central nervous system and others. This naturally leads into a comprehensive discussion of the sulfonamides and their relationship to p-aminobenzoic acid and folic acid. Since many of our modern views have been obtained from investigations of these drugs, which were responsible for the rebirth of the principle of biological antagonism in 1940, it is particularly valuable to have this work set out in a complete and yet concise manner. There follow several chapters taking up antagonists to the various amino acids and this is climaxed by a most interesting section on the antagonisms between proteins, including immunological phenomena, antibodies to enzymes and hormones, and interference among viruses. This is especially welcome, since I know of no other place where these data have been accumulated to contribute to the general theory. The next seven chapters deal with metabolite analogues or antagonists to the various growth factors and vitamins involved in cell function from the most simple bacteria to the higher multicellular animals, giving a complete summary of all compounds investigated with their effects upon various cells and enzyme systems. Hormone antagonisms are then discussed, including plant hormones, sex hormones and thyroxine. A brief review is given of ion antagonisms in microorganisms and enzyme systems, including the phenomenon of chelation, and this is followed by a chapter devoted to miscellaneous antagonisms such as are involved in the porphyrins, the basic proteins, dyes, fatty acids and substances that interfere with the sulfhydryl groups of enzymes. A short chapter on bacterial adaptation and the development of drug resistance is included since it represents a mechanism by which the cell compensates for interference within its metabolic pattern. A final chapter gives the theory of biological relativity in general terms.

The clinical and therapeutic aspects have not been neglected; thus, for example, there are discussions of the therapy of leukemias and tumors with folic acid derivatives, the chemotherapy of various infections and the possibilities inherent in these methods of further progress in such fields as thyroid suppression. I do not hesitate to state that this is the most thorough and best organized work that we have on all aspects of this subject—it will perhaps remain such for some time—and I believe that it will not only be of great value to investigators but also to biologists and clinicians who realize more and more that such principles must underlie their basic understanding of vital processes and the factors modifying them.

A COURSE IN PRACTICAL THERAPEUTICS—Second Edition—Martin Emil Rehfuss, M.D., F.A.C.P., Professor of Clinical Medicine and Sutherland M. Prevost Lecturer in Therapeutics, The Jefferson Medical College; and Alison Howe Price, A.B., M.D., Associate Professor of Medicine, The Jefferson Medical College. The Williams and Wilkins Company, Baltimore, 1951. 938 pages. \$15.00.

The first edition of this textbook, published in 1948, was given an enthusiastic recommendation in California Medicine (70:83, Jan. 1949). The second edition, brought out some three years later, contains new material which brings it up to date for current consultation. Again the volume merits hearty praise. There is no other in the field of medical therapeutics which is more practical or usable. It combines incisiveness along with remarkable inclusiveness—making it an excellent reference. And it details the most recent information on scientific treatment while retaining some of the time-tested remedies which date back to the 19th century, a profitable example of "the old along with the new."

It belongs on the shelf of the internist and the general practitioner—and will prove most useful to medical students.